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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A telephony system comprising a control unit and a plurality of telephony stations interconnected by real time communication device for operation with a packet switched network, interconnecting the real time communication device with a control unit and a plurality of remote real time communication devices, the control unit being coupled to a telephony service provider network by a plurality of outside telephone lines;

a first of the telephony stations the real time communication device comprising:

a network interface for communicating over the packet switched network;

means for establishing a logical channel to support a media session over the packet switched network with an endpoint, selected from the group of endpoints consisting of the control unit and another of the plurality of telephony stations, a one of the plurality of remote real time communication devices, for the exchange of real time streaming media with the endpoint during a media session;

means for receiving microphone input and generating compressed digital audio frames representative thereof for transmission to the endpoint during the media session and for receiving compressed digital audio frames from the endpoint and driving a speaker to output audio in response thereto;

a user interface comprising a plurality of indicators, each being associated with one of a plurality of selection buttons,

at least one of the plurality of indicators being associated with one of the plurality of outside telephone lines, the indicator indicating a status of such outside telephone line, the status being one of "available" and "in-use";

the selection button associated with such indicator being effective to

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initiate a real time communication session to a remote device utilizing such outside telephone line when activated by a user;

a status application comprising a multicast client, the multicast client:
obtaining a multicast group address of a multicast group associated
with the control unit;

joining the multicast group; and

updating the status of the indicator associated with the outside
telephone line between the "available" and "in-use" status in response to receiving a
multicast status message addressed to the multicast group address and identifying the
outside telephone line and its status.

~~means for sending a multicast status message on the packet switched~~
~~network addressed to a multicast group;~~

~~the multicast group comprising any of the remote real time~~
~~communication devices that have joined the multicast group; and~~

~~the multicast status message announcing a state of the real time~~
~~communication device, the state being a state selected from a group of states consisting~~
~~of a first state wherein the real time communication device is participating in a media~~
~~session and a second state wherein the real time communication device is not~~
~~participating in a media session.~~

2. (Canceled)

3. (Currently Amended) The telephony system of claim 1, wherein the first of the
telephony stations wherein: real time communication device of claim 1, further
comprising:

~~a user interface that includes an indication of the state of each of the remote real~~
~~time communication devices;~~

at least one of the plurality of indicators is associated with a second of the

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plurality of telephony stations, the indicator indicating a status of such second of the plurality of telephony stations, the status being one of "on-hook" and "off-hook";

the selection button associated with such indicator being effective to initiate a real time communication session to such second of the plurality of telephony stations when activated by a user; and

the status application updates the status of the indicator associated with second of the plurality of telephony stations between the "on-hook" and "off-hook" status in response to receiving a multicast status message addressed to the multicast group address and identifying the second of the plurality of telephony stations.

~~means for receiving a plurality of multicast status messages, each being sent by one of the remote real-time communication devices, and each comprising identification of the remote real-time communication device that sent the multicast status message and identifying the state of the remote real-time communication device that sent the multicast status message;~~

~~means for driving the indication to show the state of each remote real time communication device and updating the state of one of the remote real time communication devices in response to receiving a multicast status message sent by the one of the remote real time communication devices.~~

4. (Currently Amended) The telephony system real-time communication device of claim 3, wherein the status application further comprises a multicast host, the multicast host:

~~further comprising:~~

~~means for obtaining a first IP multicast address of the multicast group; and~~

~~wherein the means for sending a multicast status message comprises:~~

sending a the-multicast status message addressed to the first IP multicast group address; and

wherein such multicast status message identifies the first of the telephony

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~~stations the multicast message identifying the real time communication device and includes an indication of the status of the first of the telephony stations, the status being one of "on-hook" and "off-hook". state of the real time communication device.~~

5. (Currently Amended) The real time communication device of claim 4, wherein:
the multicast group address is an means for receiving the plurality of multicast status messages comprises receiving each of the multicast status messages on the first IP multicast address distinct from an IP address of the control unit, an IP address of the first of the telephony stations, and an IP address of the second of the telephony stations.
6. (Canceled)
7. (Currently Amended) The telephony system real time communication device of claim 5, wherein the multicast host further sends means for sending a multicast status message comprises:
~~means for sending the multicast status message~~ in response to passage of a time duration during following sending of a previous multicast status message even if there has been change in status of the first of the telephony stations.
8. (Currently Amended) The telephony system real time communication device of claim 5, wherein the multicast host further sends means for sending a multicast status message comprises:
~~means for sending the multicast status message~~ in response to receiving a status refresh request on the multicast group address. first IP multicast address.
9. (Currently Amended) A method of operating a telephony system comprising a control unit and a plurality of telephony stations interconnected by a packet switched

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network, the control unit being coupled to a telephony service provider network by a plurality of outside telephone lines, a first of the telephony stations comprising a user interface comprising a plurality of indicators, each being associated with a selection button and at least one of the plurality of indicators being associated with one of the outside telephone lines, the method for providing notice of a status of such one of the outside telephone lines, state change of a real time communication device operating in a packet-switched network, the method comprising:

obtaining a multicast group address of a multicast group associated with the control unit;

joining the multicast group; and

updating the status of the indicator associated with the outside telephone line between a status of "available" and a status of "in-use" in response to receiving a multicast status message addressed to the multicast group address and identifying the outside telephone line and its status.

~~establishing a logical channel to support a media session over the packet switched network with an endpoint, the endpoint being an endpoint selected from the group of endpoints consisting of a control unit and one of a plurality of remote real time communication devices, for the exchange of real time streaming media with the endpoint during a media session;~~

~~receiving microphone input and generating compressed digital audio frames representative thereof for transmission to the endpoint during the media session;~~

~~receiving compressed digital audio frames from the endpoint and driving a speaker to output audio in response thereto during the media session;~~

~~sending a multicast status message on the packet switched network addressed to a multicast group;~~

~~the multicast group comprising any of the remote real time communication devices that have joined the multicast group; and~~

~~the multicast status message announcing a state of the real time~~

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~~communication device, the state being a state selected from a group of states consisting of a first state wherein the real time communication device is participating in a media session and a second state wherein the real time communication device is not participating in a media session.~~

10. (Canceled)

11. (Currently Amended) The method of claim 9, further comprising:

at least one of the plurality of indicators is associated with a second of the plurality of telephony stations, the indicator indicating a status of such second of the plurality of telephony stations, the status being one of "on-hook" and "off-hook";

the method further comprising updating the status indicator associated with the second of the plurality of telephony stations between the "on-hook" and "off-hook" status in response to receiving a plurality of multicast status message addressed to the multicast group address and identifying the second of the plurality of telephony stations
~~messages, each being sent by one of the remote real time communication devices, and each comprising identification of the remote real time communication device that sent the multicast status message and identifying the state of such second of the plurality of telephony stations; and the remote real time communication device that sent the multicast status message;~~

initiating a communication session to such second of the plurality of telephony stations in response to user activation of the selection button being associated with such status indicator.
~~displaying, on a user interface, an indication of the state of each remote real time communication device and updating display of the indication of the state of one of the remote real time communication devices in response to receiving a multicast status message sent by the one of the remote real time communication devices.~~

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12. (Currently Amended) The method of claim 11:

further comprising:

~~_____ obtaining a first IP multicast address of the multicast group; and~~

~~_____ wherein the step of sending a multicast status message comprises:~~

~~_____ sending a the multicast status message addressed to the first IP multicast group address; and~~

~~_____ wherein such the multicast status message identifies the first of the telephony stations real time communication device and includes an indication of the status of the first of the telephony stations, the status being one of "on-hook" and "off-hook". state of the real time communication device.~~

13. (Currently Amended) The method of claim 12, wherein:

~~_____ the multicast group address is an step of receiving the plurality of multicast status messages comprises receiving each of the multicast status messages on the first IP multicast address distinct from an IP address of the control unit, an IP address of the first of the telephony stations, and an IP address of the second of the telephony stations.~~

14. (Canceled)

15. (Currently Amended) The method of claim 13, wherein the step of sending a multicast status message comprises:

~~_____ sending the multicast status message in response to passage of a time duration during following sending of a previous multicast status message even if there has bee no change in status of the first of the telephony stations.~~

16. (Currently Amended) The method of claim 13, wherein the step sending a multicast status message comprises:

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sending the multicast status message in response to receiving a status refresh request on the multicast group address.